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Water Docket
Environmental Protection Agency
Mailcode: 28221T
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: Docket ID No. EPA-R03-OW-2010-0736
Comments on Draft Chesapeake Bay TMDL for Nutrients and Sediment

To Whom It May Concern:

We are writing on behalf of the Virginia Manufacturers Association (“VMA”) to provide comments on EPA’s Draft Chesapeake Bay Total Maximum Daily Load (“TMDL”) for nutrients and sediment. VMA has been an active participant in both voluntary and regulatory developments affecting water quality in the Chesapeake Bay watershed. VMA is an organization formed to encourage and support the industries located within the Commonwealth of Virginia. In that capacity, VMA provides the means for industries to participate effectively in the shaping of laws, regulations and administrative rulings that affect manufacturing and mining operations throughout the Commonwealth.

Executive Summary

VMA believes that Virginia’s September 3, 2010 Watershed Implementation Plan (“WIP”) provides a sensible, well-reasoned and effective strategy for addressing Virginia’s contribution to listed impairments within the Chesapeake Bay watershed. Although the Total Suspended Solids (“TSS”) allocations for industrial point sources will need to be revised to address site-specific conditions, once those corrections are made VMA supports the WIP.

VMA has the following concerns about EPA’s proposed TMDL:

- EPA’s rejection of Virginia’s WIP and development of its own proposed allocation scheme in the TMDL is not supported by substantial evidence.
- EPA’s proposed TMDL exceeds EPA’s legal authority.

- The allocations for industrial point sources proposed by EPA in its TMDL for TSS in the partial backstop scenario are arbitrary, lack support, and do not produce meaningful environmental benefit.
- The allocations for total nitrogen (“TN”), total phosphorus (“TP”) and TSS for industrial facilities in the full backstop scenario are absurd and fail on both legal and technical grounds.

It is VMA’s hope that EPA will work with the Virginia regulatory agencies and Virginia stakeholders to develop a final TMDL that is based on sound science, environmental benefit and equity.

I. Background

Regulated wastewater and stormwater discharges from industrial sources are unique to each industrial site and process. Throughout the history of the Bay program, industry has worked collaboratively with EPA, Virginia’s regulatory agencies and other stakeholders to assess and control industrial discharges as part of the industrial community’s responsible share of the Bay reductions.

VMA has been an active participant in all of the Bay restoration efforts, including:

- (i) In 1997, when Virginia enacted the Water Quality Improvement Act, establishing a process for developing goals and providing funds for both point source and non-point source improvements.
- (ii) In 2005, when the Tributary Strategies were adopted. These strategies were instrumental in facilitating progress toward the Bay restoration goals by setting a cap on nutrient loads from significant point source dischargers. Virginia was the first state in the Bay watershed to establish such a cap.
- (iii) In 2005 during the development of Virginia’s Watershed General Permit, a permit lauded by EPA as an example for other states.
- (iv) In 2005, 2006 and 2007 during the development and implementation of a Nutrient Credit Exchange Program (the “Exchange”), a program lauded by EPA as an example for other states. Two VMA member companies serve on the Board of Governors for the Exchange Association, and many of VMA’s members participate in the Exchange, which has successfully developed trading strategies for the Virginia tributaries that discharge into the Chesapeake Bay.

- (v) In 2009, the General Assembly expanded the Exchange by amending the Code of Virginia to allow for a stormwater nonpoint nutrient offsets program for new development.
- (vi) In 2009-2010, VMA members volunteered to serve on the Stakeholder Advisory Group (“SAG”) that assisted in formulating and reviewing Virginia’s WIP.

Of course, VMA has not been alone in these endeavors. In Virginia, at least, the Bay restoration effort has been collaborative, with sustained involvement by all of the interested Bay stakeholders (from regulated industrial and municipal facilities to agricultural interests, homebuilders, watermen and environmental advocates, among many others). Working together, these stakeholders have made meaningful forward progress through consensus, compromise and cooperation. As a result of this collaborative partnership and a collective investment of more than \$1.5 billion over the past five years, Virginia has achieved significant reductions in nutrient loads discharged to the Bay from municipal and industrial wastewater treatment facilities.

To achieve their fair share of the necessary reductions, Virginia’s industrial dischargers have made many significant strategic decisions about changing their production processes or their treatment technologies. By way of brief examples:

- One facility invested millions of dollars into a project that decreased its phosphorus loadings by more than 80%.
- Another facility replaced chemicals high in phosphorus with chemicals low in phosphorus, increasing operating cost but reducing loading.
- Still another facility segregated a concentrated phosphorus wastewater stream and supplied it to another treatment facility that lacked the required amount of phosphorus for its treatment system.

Nearly all of the major industrial dischargers in the watershed are registered to participate in the Exchange. Virginia’s General Assembly, regulatory agencies and regulated community have invested substantial time and money into the success of this program. The Exchange consists of local governments and industries discharging into the Chesapeake Bay watershed working together to achieve water quality goals responsibly and cost-effectively. The Exchange’s compliance plans are based on accurate input from its members, and have helped to facilitate the timing and development of comprehensive wastewater treatment system upgrades needed to achieve the TN and TP reductions that Virginia has already committed to achieve.

We appreciate that EPA's draft TMDL preserves the pre-existing nitrogen and phosphorus allocations for significant industrial dischargers -- a decision that is fully justified by the federal and state administrative record. However, other aspects of the TMDL would disrupt the history of reductions, investment, science, and collaboration here in Virginia. EPA's proposal would upset settled and supportable expectations about the reductions that are needed to achieve our shared goal of a healthy Bay. VMA believes that Virginia's WIP provides a more equitable and technically defensible means of achieving this goal.

II. The Virginia WIP Builds Upon the Scientific and Regulatory Advances Achieved through the Collaborative Process.

Virginia's WIP was developed through a collaborative process, and we support the TN and TP allocations set forth in the WIP as originally submitted by the Virginia Department of Environmental Quality ("DEQ") on September 3. We believe DEQ erred in its TSS allocations, which were predicated on an across-the-board TSS concentration target of 30 mg/l for industrial and municipal dischargers. However, we understand that DEQ plans to correct this error to reflect appropriate and defensible industrial TSS allocations in the next iteration of the WIP. The revised version will adjust the industrial TSS allocations based on site-specific constraints at industrial facilities as substantiated in individual industrial VPDES permit proceedings. We support the process and the product that the DEQ is working to develop.

When assembling the WIP, Virginia's Secretary of Natural Resources convened a stakeholder advisory group ("SAG"), consisting of representatives of all affected stakeholders. The SAG reviewed and provided feedback on the model inputs, outputs and the feasibility of achieving a host of practices across Virginia's Bay watershed. Members reviewed and advised on sector pollutant load reductions and the sector allocations that would be used to meet the interim and final goals established by EPA (for nitrogen and phosphorus, but not for TSS). Through this collaborative process, Virginia obtained input from affected sources, including valuable technical expertise on the workings of the model and the impacts and achievability of various allocation proposals.

The WIP drew upon two core aspects of Virginia's regulatory program: (1) the WGP, which serves as a vehicle for implementing the regulatory nutrient allocations assigned to significant industrial and municipal dischargers; and (2) the Exchange, which facilitates implementation of these allocations by and among facilities in the most cost-effective manner.

A. Watershed General Permit and Waste Load Allocations.

1. Point Source Allocations.

In 2005-2006, final, enforceable nutrient wasteload allocations (“WLAs”) for TN and TP were adopted under state law for significant wastewater treatment facilities within the watershed. Individual WLAs were assigned to each of Virginia’s 125 significant industrial and municipal dischargers, along with an allowance (“permitted design capacity”) for the non-significant dischargers (Va. Code § 62.1-44.19:12).

Virginia’s WIP captures and preserves these allocations, which have set the standard (and expectation) for required reductions within the regulated point source sector. In addition to individual WLAs for significant industrial and municipal dischargers, Virginia’s WIP aggregates the WLA for non-significant dischargers, consistent with state law and long-standing EPA practice in reviewing and approving hundreds of state TMDLs and allocation schemes.

The allocations in Virginia’s WIP reflect and reinforce the reductions from point sources that are necessary, achievable and equitable to meet the Bay restoration goals. The WIP, on page 39, outlines the basis for the point source allocations: “When Virginia’s point source nutrient discharge control regulations were adopted in late 2005, the annual TN and TP WLA for Significant Dischargers were based on a combination of total design flow and stringent nutrient removal technology (NRT). The level of NRT applied to the regions of the Bay tributaries varied somewhat, in consideration of:

- delivery factors affecting loads discharged above the fall line and reaching tidal waters
- modeled water quality response and compliance with tidal water quality standards
- the combined size of the discharges and resulting loads
- available technology
- equivalent treatment in terms of comparable “level of effort” between municipal and industrial facilities.

2. Nonpoint Source Allocations.

Virginia has made substantial investments through the Water Quality Improvement Fund and other grant programs to address nonpoint source nutrient loading. The WIP demonstrates a continuing commitment to sustain and strengthen those efforts. This is

consistent with Virginia's approach of maximizing point source reductions on the front end and then adapting the management strategy to shift greater attention toward nonpoint sources that tend to be more diffuse and, in turn, more difficult to control.

The adaptive management strategy adopted by Virginia in its WIP is entirely consistent with EPA guidance on TMDL development and implementation, builds on Virginia's successful development of more than 600 TMDLs over the past 10 years, and enables Virginia's strategy to continue to evolve with changing technology and information about how (and to what extent) certain sources impact water quality.

B. Nutrient Credit Exchange Program.

Through a collaborative process, Virginia has developed the Exchange, a trading program designed to enable significant nutrient reductions to be achieved in the most cost-effective and efficient manner. To date, the Exchange has 105 participating industrial and municipal members. The Exchange developed compliance plans for each of Virginia's tributaries to the Bay, ensuring that the Commonwealth has or will achieve its nutrient reduction goals in a timely and step-wise manner. The first "official" year of nutrient trading will be 2011, with performance to be assessed and reconciled in each successive year.

The Exchange is a highly structured and highly regulated point-point trading program. It is supervised by the Virginia DEQ, which has reviewed and approved the Exchange Compliance Plan, and receives annual reports from the Exchange and/or individual dischargers on the trades and reductions planned or achieved. In 2009, the Exchange was expanded to address non-point source discharges, allowing new or expanded stormwater discharges to use offsets generated by non-point sources.

The trading program represents an approach to water quality management that makes sense from an environmental and efficiency perspective. Virginia has documented its goals and expectations for the program, as well as its recognition that, through adaptive management, additional changes may be necessary in the future to ensure that our shared water quality restoration goals are in fact achieved.

III. EPA's Basis for Finding the Virginia WIP Deficient is Unlawful.

A. EPA Cannot Compel Virginia to Provide "Reasonable Assurance" Without First Defining How this Standard Must be Met.

EPA's primary basis for rejecting the allocation scheme in Virginia's WIP is an unfounded concern that the load allocation ("LA") will not be achieved and, as a result, the WLA must be further reduced below existing regulatory levels. EPA couches this concern in terms of "reasonable assurance" -- specifically, that Virginia has not provided adequate reasonable assurance that the LA assigned to nonpoint sources will in fact be realized. EPA ignores the fact that its own guidance provide that reasonable assurance is only required in those TMDLs that are dominated by point sources. *See, e.g.*, EPA, New Policies for Establishing and Implementing Total Maximum Daily Loads (TMDLs), August 1997. It is widely recognized that, because of the point source reductions achieved to date, the sources needing further attention in the Chesapeake Bay are predominantly nonpoint sources. Where waters are impaired by a blend of point and nonpoint sources and nonpoint sources dominate, as is the case in the Bay watershed, the reasonable assurance concept does not apply. *Id.*

Even if the reasonable assurance concept did apply here, it cannot be used as the primary basis for rejecting Virginia's WIP because it has not been adequately defined. EPA has never explained how much reasonable assurance is enough, or, alternatively, how much assurance is reasonable. *See, e.g.*, Enclosure A of EPA Region III Letter to Maryland Secretary of the Department of Natural Resources, September 11, 2008, "Neither the Clean Water Act nor EPA's regulations provide a definition of 'reasonable assurance.'" Absent such an explanation, Virginia has no guideposts by which to measure its nonpoint source reduction strategies.

Recognizing the need for a clear answer to these "how much is enough" questions, EPA added a definition of reasonable assurance to its TMDL rule revisions in July 2000. Under that definition, reasonable assurance of nonpoint source reductions hinged on a test that focused, among other factors, on whether the proposed control actions would be "implemented as expeditiously as practicable" and "accomplished through reliable and effective delivery mechanisms."¹

¹ "For nonpoint sources ... the demonstration of reasonable assurance must show that management measures or other control actions to implement the load allocations contained in each TMDL meet the following four-part test: they specifically apply to the pollutant(s) and

After more than four years in the making, EPA's 2000 definition of "reasonable assurance" never took effect. Before the final rule was even published in the *Federal Register*, Congress used a spending prohibition to bar EPA from implementing it due to significant concerns about many aspects of the rule. Subsequent lawsuits, review by the National Research Council, and further deliberations by the Agency eventually led to withdrawal of the rule in 2003.

Around this same time, EPA proposed a replacement Watershed Rule.² In this replacement rule, EPA abandoned its 2000 definition of reasonable assurance, opting instead for the following:

EPA is proposing ... to require that a jurisdiction submit as part of its TMDL supporting analysis and documentation a demonstration that the load allocation is "practicable" (i.e., that it can be accomplished using available and achievable methods).

In requiring jurisdictions to submit supporting analysis and documentation that the load allocations are practicable, EPA is intending that jurisdictions would show that they have considered whether the TMDL's load allocation to nonpoint sources are achievable based on currently available information regarding both the *technical feasibility* of the practice or management measures but also the *likelihood that they would be implemented based on economic, social and cultural considerations*.³

the waterbody for which the TMDL is being established; they will be implemented as expeditiously as practicable; they will be accomplished through reliable and effective delivery mechanisms; and they will be supported by adequate water quality funding." 65 Fed. Reg. 43,586, 43,663 (July 13, 2000) (to be codified at 40 C.F.R. §130.2(p)).

² EPA released a deliberative draft of this rule on January 10, 2003.

³ Watershed Rule at pp. 90-91 (emphasis added).

This renewed focus on practicability (already a component of the existing TMDL rules) marked a dramatic change in EPA's approach to reasonable assurance, which was in part a reaction to the lawsuits over the 2000 rule and in part the result of significant additional outreach to the public between October and December 2001. (EPA hosted five listening sessions around the country during this period.)

The Watershed Rule reflects the latest official position taken by EPA on reasonable assurance; but, like the 2000 rule, the Watershed Rule never took effect.⁴ As a result, states continue to lack any guideposts from EPA by which to measure their nonpoint source reduction strategies.

EPA's reliance on the undefined "reasonable assurance" concept to reject Virginia's WIP is essentially the application of an unpromulgated rule. Imposition of the backstop consequences against Virginia for failure to provide "reasonable assurance" is an abuse of EPA's authority. Before EPA can compel states to provide reasonable assurance that their proposed nonpoint source reductions will be achieved, EPA first must go through a notice-and-comment rulemaking process (as it has attempted twice before) to define how this standard must be met.

B. EPA Does Not Have the Authority to Compel Virginia to Develop a WIP, Much Less Threaten Draconian (Full Back Stop) Allocations on the Basis of Alleged WIP Deficiencies.

EPA does not have authority to require, much less reject, TMDL implementation plans. The Clean Water Act only gives EPA authority over the impaired water designations and the TMDLs themselves. CWA 303(d)(2). It does not give EPA the ability to weigh in on how the TMDLs will be implemented, if at all.

Implementation planning is not part of Section 303(d) of the Clean Water Act or the regulations promulgated thereunder. Even if it were, meaningful implementation plans cannot be developed until after a TMDL is in place and the reductions set forth in the TMDL are established. Thus, even if EPA had the authority to require a WIP (which it does not), it is premature to require development of such measures before a TMDL has been finalized and the specific allocations required by the TMDL are known.

⁴ In April 2005, EPA officially abandoned this rulemaking.

EPA asserts that “Section 117(g) of the Clean Water Act provides a legal framework for ensuring that the signatory jurisdictions develop and begin implementing management plans that achieve the nutrient and sediment loading reductions needed to restore the Bay.”⁵ ***But the legislative history of Section 117(g) makes clear that Congress did not provide EPA with any additional regulatory authority to require implementation plans.***⁶

By its own admission, EPA also lacks any existing regulatory authority to require implementation plans.⁷ EPA attempted to establish such authority in its 2000 TMDL rule revisions. *See* 65 Fed. Reg. at 43,667 (to be codified at 40 C.F.R. § 130.32(11)). However, as noted above, those revisions never took effect and were eventually withdrawn.⁸

EPA’s practice in reviewing and approving or disapproving state TMDLs makes it clear that EPA lacks any existing regulatory authority over implementation plans.⁹ Whenever

⁵ EPA’s 202(a) Report at p. 15; *see also* Bay TMDL at 1-12.

⁶ “The [Congressional] Committee expects EPA to meet the requirements of this paragraph through the award of implementation grants under subsection (e). Nothing in the Chesapeake Bay Restoration Act provides EPA with any additional regulatory authorities.” H. Rept. 550, 106th Cong., 2d Sess., at 3 (2000).

⁷ *See* EPA’s Overview of Impaired Waters and Total Maximum Daily Loads Program (“Section 303(d) of the CWA does not specifically require implementation plans for TMDLs.”). This basic concession is repeated in literally thousands of EPA decision rationales approving state TMDL submittals (for example, *see* footnote 25 below).

⁸ Several industry petitioners challenged EPA’s statutory authority under Section 303(d) of the Clean Water Act to require implementation plans. One of the arguments raised was that EPA misconstrued the language “at a level necessary” in 303(d)(1)(C) to mean “level of regulatory effort” instead of “pollutant level,” as clearly contemplated by Congress. Additionally, Congress had already supplied a means for EPA to oversee implementation through section 303(e). Congress would not have drawn the requirements of that section so broadly if it had intended the 303(d) TMDL to include implementation requirements.

⁹ *See* EPA’s Overview of Impaired Waters and Total Maximum Daily Loads Program (“Although states are not required under section 303(d) to develop TMDL implementation plans, many states include implementation plans with the TMDL or develop them as a separate document. When developed, TMDL implementation plans may provide additional

a state TMDL includes an implementation planning component, EPA routinely notes in its decision letter that the Agency is not taking any action on that component because it falls outside of the TMDL process.¹⁰

Virginia itself has enacted legislation requiring development of implementation plans for TMDLs. Va. Code §§ 62.1-44.19:4 to -44.19:8. This is a Virginia statute, not a delegated requirement from EPA. EPA has no independent authority to enforce it.

Even if EPA did have the ability to enforce Virginia's implementation planning statute, EPA would be bound by the criteria identified in that statute. Virginia's statute requires that cost and achievability must be evaluated as part of the implementation plan development. Va. Code § 62.1-44.19:7. EPA's evaluation of Virginia's WIP fails to recognize cost and achievability as factors that must be considered in the development of an implementation plan, and thus does not comply with Virginia law.

EPA cannot impose draconian allocations on the basis of deficiencies in an implementation plan that it has no authority to mandate. Even if EPA did have the ability to require an implementation plan under Virginia's statutory program, it has failed to apply the achievability and cost criteria required under that program.

C. EPA Does Not Have the Legal Authority to Impose a Schedule for Implementation.

EPA has unilaterally established a schedule for achieving 60% of the reductions set forth in the Bay TMDL by 2017, and 100% of the reductions by 2025. *See* Bay TMDL Executive Summary at page 1. To meet this schedule, EPA has mandated that the states meet recurring two-year milestones to demonstrate their restoration progress or suffer certain EPA-

information on what point and nonpoint sources contribute to the impairment and how those sources are being controlled, or should be controlled in the future.”).

¹⁰ *See, e.g.*, EPA's decision rationale for approving the Tidal Potomac PCB TMDL established by the Interstate Commission on the Potomac River Basin, dated October 31, 2007, at p. 12 (“***Neither the Clean Water Act nor the EPA implementing regulations, guidance or policy requires a TMDL to include an implementation plan. EPA therefore does not approve or disapprove implementation plans as part of the TMDL process.***”) (emphasis added).

prescribed consequences. Bay TMDL at page 1-12 (“The Bay TMDL will be implemented using an accountability framework that includes WIPs, 2-year milestones, EPA’s tracking and assessment of restoration progress and, as necessary, specific federal actions if the Bay jurisdictions do not meet their commitments.”).

The problem with EPA’s schedule and mandate is that EPA has no authority to compel them. Nothing in the Clean Water Act or EPA’s implementing regulations provides a deadline for TMDL implementation. To the contrary, TMDLs are simply planning tools to help inform state water quality management decisions. EPA has conceded as much in prior TMDL litigation. *See, e.g., Pronsolino v. Nastro*, 291 F.3d 1123, 1120 (9th Cir. 2002).

IV. There is No Support for the TSS Allocations Proposed in EPA’s TMDL Under Either the Partial Back Stop or Full Backstop Scenarios.

A. Virginia’s WIP Met EPA’s Sediment Allocation.

EPA has acknowledged that Virginia’s WIP met the sediment allocation required by EPA. *See* EPA’s Draft Bay TMDL Executive Summary, page 7. As part of its allocation scheme for sediment, Virginia’s WIP assigned an across-the-board point source TSS concentration of 30 mg/l for significant dischargers. This across-the-board application is in error, and it is VMA’s understanding that Virginia will be correcting this assumption in the next iteration, recognizing site-specific capabilities and impacts of industrial point sources. Even with this change, the WIP will continue to outperform EPA’s sediment target. Accordingly, EPA cannot demonstrate a need to impose either the partial or full backstop allocations for TSS.

Even if additional TSS reductions were necessary, EPA has not provided any evidence that those reductions must come from industrial point sources. Section 4.5.2 of the TMDL indicates that from the 75 significant and 1,446 non-significant industrial point sources, the estimated 2009 TSS waste load to the Chesapeake Bay was 0.5% of the total load. Furthermore, EPA notes that the TSS load for industrial point sources is not significant and thus does not present the TSS model by jurisdiction.

The model runs performed by EPA demonstrate that the TSS load from industrial point sources is not significant. The model input from DEQ set a TSS target of 30 mg/l for significant point source dischargers. EPA ran the model with that input but also ran it with a target of 5 mg/l. The results of those model runs show only minimal changes. This is because the TSS load from point sources is so *de minimis* that it has no impact on the model

outcome, regardless of the concentration target that is assigned. The drastic reductions proposed by EPA will have no meaningful effect on the impaired segments of the watershed.

In short, there is no evidence in the record to support EPA's proposed allocations for TSS for industrial facilities in the partial or full backstop scenarios.

B. Total Suspended Solids are Not the Same as Sediment, so Addressing TSS from Point Source Industrial Discharges Will Not Result in Sediment Reductions.

TSS and sediment are not the same. The TSS that is discharged by industrial point sources is not a source of or contributor to the impairments being addressed through the TMDL. Rather, sediment resulting from stream bank erosion and soil runoff is the parameter that EPA is or should be targeting. EPA's Chesapeake Bay Program office website points this out, by explaining that the sources of sediment to the Bay are agriculture (60%), natural sources (21%) and urban/suburban runoff and in-stream sediment (19%). Industrial point sources are properly excluded from this source identification. *See* http://www.chesapeakebay.net/statut_sedimentsources.aspx?menuitem=20800. *See also* <http://www.chesapeakebay.net/sediments.aspx?menuitem=15221> ("There are two major sources of this sediment: watershed sources and tidal sources. Erosion of the land and stream banks are watershed sources of sediment. Watershed erosion increases when land is cleared of vegetation for agriculture and development. Scientists estimate that the majority of the sediment that flows to the Chesapeake Bay comes from watershed sources. Erosion of shorelines and nearshore areas, as well as the resuspension of previously eroded sediments, are tidal sources of sediment. Tidal erosion increases when shoreline vegetation is removed and there are not enough bay grasses growing in the shallows to soften wave action against the shoreline.").

EPA has acknowledged that the sediment of concern in this particular proceeding is not generated by point sources. *See, e.g.*, Chesapeake Bay Journal, "EPA gives watershed states draft sediment limits for TMDL," <http://www.bayjournal.com/article.cfm?article=3927> (including explanation from Rich Batiuk that additional on-the-ground actions may be needed to address sediment in tributaries where point sources are the dominant sources of phosphorus, because phosphorus controls in wastewater treatment plants do not reduce the amount of sediment in rivers).

Instead, the sediment of concern is inorganic in nature, and is associated with erosion from upland land surfaces and erosion of stream corridors (banks and channels). USGS, "A

Summary Report of Sediment Processes in Chesapeake Bay and Watershed,” 2003. By contrast, the sediment found in most industrial wastewater is organic, and does not have the same environmental impact as inorganic sediment. *See, e.g.*, “A Review of the Characteristics and Fate of Suspended Solids Discharged with Biologically Treated Effluents from Pulp and Paper Mills,” Dr. William E. Thacker, National Council for Air and Stream Improvement, Inc., October 2010 (concluding that the TSS discharged from pulp and paper mills is organic in nature and has an insignificant nutrient component) (copy attached).

For example, TSS in the effluent discharged from pharmaceutical plants is not similar to sediments generated by storm water runoff, atmospheric or geologic events. Pharmaceutical plants often use large quantities of naturally produced (organic) ingredients and chemicals as raw materials for the manufacture of life saving medicines. A fraction of these raw materials or their derivatives that cannot be converted into products is discharged as wastewater. The majority of such organic wastes (signified by BOD, TN and TP) are treated in the industrial wastewater treatment process; however, a small portion of solids in the submicron to tens of micron size range remain suspended and pass through the sedimentation (clarification) systems as TSS, of which 80% or more is organic matter based on total volatile suspended solids (TVSS) assay. The nitrogen and phosphorus present in this TSS is already accounted for and addressed and is no longer present in the TSS ultimately discharged from the facility.

Similar distinctions apply throughout the industrial point source sector. In short, industrial TSS is unique, cannot be addressed in the same manner as other sources of sediment, and does not have the same environmental impact as sediment runoff.

C. The Bay Program’s Approach to Addressing Point Source Sediment Contributions through TN and TP Reductions is Technically Justifiable.

EPA led the states to believe that achieving the TN and TP targets would lead to corresponding sediment reductions sufficient to achieve EPA’s sediment targets. However, EPA’s proposed TMDL flips this around, in effect making sediment the controlling parameter. This is not supported by the record or the process that led to the development of the WIP and TMDL. *See, e.g.*, EPA’s Proposed TMDL at page 6-8: “Because of the hierarchy of WQS response, the strategy developed to achieve WQS was to first set the nutrient allocation for achieving all the DO and chlorophyll *a* WQS in all 92 segments, and then set additional sediment reductions where needed to achieve the SAV/water clarity WQS.”; page 6-14: “EPA established the Bay TMDL allocations [for sediment] primarily at

levels that were attained as a result of the management controls proposed in the state WIPs for controlling nitrogen and phosphorus.”

The Chesapeake Bay model demonstrates that the nitrogen and phosphorus allocations proposed for industrial point sources will be sufficient to achieve the TSS allocations required by EPA without the partial or full backstop allocations proposed by EPA.

D. There is No Evidence in the Record that Point Source Sediment Reductions are Necessary.

The record demonstrates that the point source sediment loadings is *de minimis* (in 2009, the point source loading was 12,605 tons/year as compared to a total loading of 1,616,028 tons/year). EPA’s proposal would essentially ratchet this *de minimis* contribution down to a level of unachievability without any corresponding benefit. EPA’s proposal seems to contradict itself, as EPA states “Modeled sediment loads for those [industrial] facilities are not presented because wastewater discharging facilities represent a *de minimis* source of sediment (i.e., less than 0.5 percent of the 2009 total sediment load).” EPA Proposed TMDL at page 4-17.

Moreover, in announcing its proposed sediment allocations for the Bay states, EPA’s press release noted “[a]n EPA analysis indicates the likelihood that measures to control and reduce nutrient pollution as outlined in these WIPs will also significantly reduce sediment runoff, achieving the annual sediment limits.” EPA News Release, 8/13/2010, “EPA Proposes Sediment Limits for Chesapeake Bay Pollution Diet.” The model runs have born out EPA’s expectation - the reductions of nitrogen and phosphorus in Virginia’s WIP demonstrated that the sediment allocation would be met - in fact, Virginia’s WIP would result in reducing sediment 12% beyond what was required by EPA. As a result, EPA’s partial and full backstop allocations for TSS are nonsensical, in effect addressing a “problem” that does not exist.

E. EPA’s Sediment Allocations are Predicated on Municipal Filtration Technology that is Neither Proven Nor Feasible at Industrial Facilities.

The Virginia WIP set allocations for sediment for all significant municipal and industrial point sources based on a TSS concentration target of 30 mg/l. “Allocations for sediment loads will be set at technology levels since wastewater is an insignificant portion of the sediment load.” Virginia WIP at page 11. The Virginia DEQ has now recognized that such an across-the-board determination cannot be made for industrial facilities, because their

technology-based guidelines are different than those for municipal plants (and, in fact, different within each industrial sector). Moreover, the technology available to municipal plants is not necessarily proven or available at industrial facilities and, in any event, will not produce the same results (i.e., there are significant cost, feasibility and achievability issues associated with filtration technology at industrial facilities). It is VMA's understanding that Virginia's revised WIP will adjust the TSS allocations for industrial facilities to reflect unique industrial constraints.

While Virginia's WIP requires improvement in this one area, EPA's TMDL is even more dramatically flawed, in effect setting point source allocations based on a TSS concentration target of 5 mg/l. EPA offers no explanation for this approach in the TMDL, and has failed to meaningfully respond to questions about this approach at the public meetings on the draft TMDL. However, EPA has inferred that the 5 mg/l target was derived based on data from an advanced (Enhanced Nutrient Removal) municipal treatment plant in Maryland.

As noted above, municipal filtration technology is not cost-effective or feasible at many industrial facilities, and, in any event, is unlikely to achieve EPA's target concentration (or resulting allocation). This is because the TSS in most industrial discharges is organic in nature, and of a very small size. Accordingly, there is great difficulty in settling the solids through the treatment process. *See, e.g., Thacker Study.*

The ability of a wastewater treatment plant to meet extremely low effluent TSS limits is based, to a large extent, on the source of wastewater that is being treated. This is why EPA has established effluent guidelines based on categories of dischargers. As an example, higher TSS limits are provided in the Effluent Limitations Guidelines for certain industrial categories. For example, a paper mill producing 1350 tons per day of paper is allowed by subpart E of 40 CFR Part 430 to discharge 6210 pounds of TSS per day on a 30 day average. If the mill's effluent flow is 6.5 MGD, which is common for a mill of this size, then the TSS concentration in the effluent is permitted to be 114 mg/l. The technology-based guidelines developed by EPA recognize the unique aspects of various industry types. EPA's proposed TMDL does not make such distinctions, instead applying an across-the-board allocation based on a treatment technology achieving 5 mg/l. The filtration technology available would not be capable of achieving a TSS concentration of 5 mg/l in many industrial settings, due to the nature of the TSS generated in that process. Again, a more site-specific determination of appropriate limitations, and an analysis of the need for such limitations, is necessary but missing from EPA's draft TMDL.

V. There is No Support for the Nitrogen and Phosphorus Allocations Proposed in EPA's TMDL Under the Full Backstop Scenario.

A. The Partial Backstop Allocations for Nitrogen and Phosphorus for Industrial Dischargers are Consistent with the Virginia WIP and Supportable.

The Virginia WIP established TN and TP allocations that Virginia DEQ believed would achieve the allocations established by EPA. The fact that EPA's model runs determined that Virginia's allocations were slightly above EPA's target allocations raises concerns about whether the input decks provided by Virginia were accurately used in the model. It is VMA's hope that Virginia and EPA will continue to work together to determine the basis for the discrepancy in output data.

Virginia's WIP included TN and TP allocations for industrial dischargers that are supported by the regulatory process and available science. EPA included those allocations in its partial backstop allocations. VMA supports the TN and TP allocations for industrial point sources included in EPA's partial backstop.

B. Virginia's Approach of Aggregating WLAs for Nonsignificant Point Source Dischargers is Supported by the Record and Available Data.

Virginia's WIP included an aggregated wasteload allocation for nonsignificant point sources. This is the same approach that Virginia has used successfully hundreds of times in the past through TMDLs reviewed and approved by EPA. In this case, Virginia derived the aggregate allocation with support from EPA and EPA's contractor, TetraTech, using SIC classifications and facility size to project loadings. Virginia's WIP is backstopped by the Nutrient Credit Exchange Law, which provides a mechanism for holding nonsignificant dischargers below certain thresholds.

EPA's proposal, by contrast, would assign an individual wasteload allocation to each and every nonsignificant discharger. Such an approach is unnecessary and rife with potential for error. Among other problems, EPA cannot meaningfully identify each and every nonsignificant discharger within a 64,000 square mile watershed. Toward that end, we understand that EPA excluded many dischargers based on its inability to locate them in the model. Moreover, EPA assumed in the draft TMDL that nonsignificant dischargers for which no data were available would have a wasteload allocation of zero. Setting allocations without any basis in fact must fail both as a matter of good science and good public policy.

C. There is No Evidence in the Record to Support the Full Backstop Allocations.

EPA appears to have developed the full backstop allocations as a threat to Virginia -- revise your WIP or suffer the consequences. EPA fails to provide any explanation for how or when the full backstop allocations would apply, other than a vague statement that they could be used if a state's WIP is not adequately modified. However, there is nothing in the TMDL record to support these allocations. And there is nothing in the law that would empower EPA to bear out this threat. The backstop allocations are arbitrary and capricious and should be stricken from the TMDL.

D. EPA's Full Backstop Allocations Ignore Achievability and Cost.

EPA's full backstop allocations impose absurd reductions on industrial facilities. For example, for one significant industrial discharger in the York River, EPA's partial backstop WLA (which we support) is set at 23,617 lb/yr TN and 6,804 lb/yr TP (delivered loads). By contrast, the full backstop allocation for this same facility is 8,074 lb/yr TN and 1,098 lb/yr TP. Likewise, a significant discharger in the James is allocated a partial backstop WLA of 136,510 lb/yr TN and 2,329 lb/yr TP; under the full backstop allocation the same facility is assigned 33,096 lb/yr TN and 272 lb/yr TP. These reductions are severe, may be unachievable and, more likely than not, are unnecessary. However, EPA's record offers nothing about their achievability or need, let alone how they were derived. VMA has grave concerns about these omissions.

Virginia has enacted legislation requiring implementation planning for TMDLs. Va. Code § 62.1-44.19:7. That legislation requires that such plans include an analysis of the associated costs, benefits and environmental impact of addressing impairment. *Id.* EPA has failed to do so here. As noted above, EPA does not have any independent authority to require or impose implementation plans on states. The Virginia WIP, if required at all, is required by Virginia law and, accordingly, must address all of the elements outlined in the relevant statutory provision.

Moreover, EPA ignores its own statutory and regulatory provisions authorizing consideration of cost and achievability in determining the appropriate designated uses for a water body. EPA has acknowledged that "[o]ne way to achieve efficiency in the process of assigning attainable designated uses is to better synchronize UAA analyses with the TMDL process. In practice, UAAs may be conducted prior to, concurrently with, or after the development and implementation of a TMDL. In many cases, the data generated during a

TMDL could well serve as the foundation for deciding whether a change in a use is warranted.” EPA, Basic Information: Introduction to UAAs, <http://water.epa.gov/scitech/swguidance/waterquality/stadnards/uses/uaa/info.cfm>.

EPA’s regulations provide that a change to a designated use may be appropriate where “controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.” 40 CFR § 131.10. For this reason, the National Research Council has recommended that states conduct use attainability analyses for a waterbody before a TMDL is developed. *See Assessing the TMDL Approach to Water Quality Management, Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction, National Research Council, 2001.*

This is consistent with Virginia’s statutory provisions, which provide a process for conducting a use attainability analysis (“UAA”) based on presentation of “reasonable grounds indicating that the attainment of the designated use for a water is not feasible.” *See Va. Code § 62.1-44.19:7.E.* EPA’s proposal fails to consider cost and achievability in its proposed TMDL, despite its own UAA regulations and Virginia’s implementation planning statute.

E. EPA’s Proposed Allocations for Stormwater Contain Mistakes that Must be Corrected Before the TMDL is Finalized.

The TMDL provides a wasteload allocation for municipal separate storm sewer systems but not for industrial or construction stormwater sources. We understand that EPA’s designation is in error and that EPA intended for its wasteload allocation to include all three sources of stormwater loading. EPA needs to correct the TMDL to reflect this. EPA also needs to explain how it assigned this allocation, recognizing that in many cases, the loading from municipal, industrial and construction sources overlap (*e.g.*, within the same local jurisdiction).

VI. Virginia’s Strategy for Revising Chlorophyll-*a* Water Quality Criteria for the James River is Sensible, Consistent with the TMDL Implementation Process, and Protective of Water Quality.

As noted in the Virginia WIP and acknowledged by EPA during our October 6, 2010 meeting, there is a need to amend the James River Site-Specific Numeric Chlorophyll-*a* Criteria. Unless and until the criteria are amended, any allocations designed to achieve them will be premature and, more likely than not, overprotective. Under Section 303(d)(1)(C) of

the Clean Water Act, a TMDL cannot be overprotective. Rather, it must be set at the level necessary to implement the applicable water quality standard. In this case, EPA has acknowledged that the applicable standard needs to be changed, and Virginia has proposed a sensible plan for making near-term reductions while the regulatory process plays out. Virginia's plan does not abdicate responsibility for reductions in the James River and does not otherwise violate the schedule established by EPA. We strongly support Virginia's step-wise approach and urge EPA not to impose reductions in the TMDL that prove to be overprotective once the criteria are amended.

VII. EPA's Proposal Raises Significant Policy and Technical Concerns.

A. EPA's TSS Proposal Undermines the Nutrient Credit Exchange Program.

The Exchange was developed in reliance on the long-standing expectation that investments in technology to achieve nutrient and phosphorus reductions would in turn drive point source loadings of sediment. The drastic TSS limitations resulting from EPA's partial and full backstop proposals undermines this process, because different technologies will be necessary to achieve the TSS limitations. EPA's proposal, in effect, makes TSS the driver for technology investments rather than nitrogen and phosphorus. This is a marked shift in the program that undermines the investments and trading programs established under Virginia's regulatory trading program.

B. EPA Omitted Crucial Data and Information from the TMDL Record, Thereby Depriving Interested Stakeholders of the Opportunity for Meaningful Review and Comment.

As a general matter, EPA's proposed TMDL does not provide information about whether and how delivery factors were used to establish the proposed allocations. This impacts the allocations within individual tributaries, but also across industry sectors. As noted in the sections above addressing TSS, the make up of constituents at different facilities have different water quality impacts. The delivery factors for TSS from industrial point sources, based on the organic nature of the TSS loads from such sources, should be very low.

Additionally, EPA failed to share the inputs generated by the "Scenario Builder," which were then used in the Chesapeake Bay Watershed Model. *See* Draft TMDL, Section 8 and Appendix H. Despite the significance of this information, EPA did not make the Scenario Builder input decks and outputs for the partial backstop and full backstop scenarios and for EPA's evaluation of Virginia's WIP available until November 2, 2010. This was 39 days into

the 45 day comment period. This is hardly enough time for stakeholders to meaningfully comment on such critical aspects of the modeling data.

The accelerated pace established by EPA undermines EPA's claims that it values stakeholder input and desires a transparent and open TMDL development process. This is especially true given the fact that the consent decrees that EPA relies upon as the basis for the accelerated timetable don't require the Bay TMDL to be completed until May 2011. EPA itself has chosen to move the deadline up to December 2010.

In sum, while EPA is quick to note that the efforts to restore the Bay have been ongoing since the 1980s, its proposal represents a marked change in both the expectations for the industrial dischargers under the full backstop allocations and its view of the Virginia regulatory program. EPA has not provided the public with the opportunity to understand how the model works and the implications of the changes in the input data sets. EPA has only allowed 45 days for comment on its proposal. The lack of transparency in EPA's proposal, coupled with a limited review period, stands in contravention to the regulatory process envisioned by the Administrative Procedure Act.

C. The Truncated Development Process Does Not Allow Sufficient Time to Address Technical and Modeling Concerns.

Virginia's regulatory programs, reviewed and approved by EPA, establish nutrient and corresponding sediment allocations that will achieve significant additional reductions in nutrient and sediment loadings to the Bay watershed. Industrial point sources have made significant investments based on these regulatory expectations. EPA has now threatened to turn the Virginia program on its head, proposing drastically different allocations and expectations, and it has done so through an expedited regulatory process that does not allow sufficient time to address fundamental technical and modeling concerns.

EPA acknowledges that the model is continuing to evolve, that there are technical errors to be corrected, and that the model results do not always accurately predict on-the-ground results. Yet the expedited process EPA has established does not allow time to address those deficiencies and concerns.

The expedited process established by EPA also does not allow sufficient time for the states to review and address comments received on the Bay TMDL as part of the WIP modification process. It is our understanding that the states will have only 4 days following the close of the public comment period on November 8 to develop revised input decks and

request new model runs from the Chesapeake Bay Model. The states do not have enough time to process the comments receive and incorporate them into their decisions about input decks and model runs. The truncated process creates the perception that EPA does not take the states' interests, concerns and available expertise seriously because it has not allowed them sufficient time to review and address the comments that are received.

D. EPA's Proposal Ignores the Limits in the Predictive Ability of the Bay Models.

EPA's proposal assumes a greater level of precision and accuracy than the models provide. As the Virginia DEQ noted in its WIP, the Chesapeake Bay Watershed Model "is not a perfect representation of actual conditions on the landscape." Virginia WIP at page 11. Rather, the model is a rough approximation of how given management scenarios will impact water quality. EPA's proposal ignores the limits in the predictive ability of the Bay model and instead uses it as the driver for drastic reductions. For example, EPA predicts dissolved oxygen concentrations and non-attainment rates in specific segments to the single percentage point level under a variety of management scenarios. This level of precision and accuracy is beyond the capability of the models.

The Bay models are continuing to evolve. As the models evolve, the predicted loads and goals for the Bay system have shown great variability. These variations will continue as the model is refined. EPA ignores this variability, blindly adhering to assumptions that would result in drastic reductions.

EPA should provide a detailed discussion of the model's accuracy and precision, including quantification of the model's error band and use of safety factors and other assumptions. Such an analysis of the model's accuracy and precision is critical given the incredible adverse economic impact the draft TMDL will have on the stakeholders throughout the watershed.¹¹

¹¹ The discussion in Section 5 of EPA's draft TMDL discusses calibration, but fails to address the accuracy or precision of the Bay model.

E. Certain “Assumptions and Requirements” in EPA’s Proposed TMDL are Faulty.

1. Awarding Credits for Alternative Projects Must be Supported by Sound Science.

VMA supports EPA’s willingness to give credit to Virginia for alternative projects to reduce nitrogen and phosphorus. Allowing such credits will foster creativity in achieving the water quality goals for the Bay. However, such credit should only be awarded where the available science supports the expected benefit.

For example, Appendix U provides that if states can show a change in the population of filter feeders (menhaden and Eastern oysters), then the state would receive a credit towards reaching the EPA’s two-year milestone. However, EPA’s assumptions about the role of menhaden conflicts with the available science.

During 2008 and 2009, researchers at the Virginia Institute of Marine Science (VIMS) conducted a study to assess the efficacy of menhaden behavior to remove nitrogen from the waters of the Chesapeake Bay through consumption of phytoplankton (Lynch et al 2010). While menhaden do filter large amounts of water and take phytoplankton particles into their mouths, it is not clear that they remove sufficient phytoplankton from the water to offset the introduction of nitrogenous products from anthropogenic sources.

VIMS’ research, involving tank feeding studies, found that age 0, or young-of-the-year (juvenile) menhaden do consume measurable amounts of phytoplankton through their filter feeding behavior. This is consistent with research by Friedland et al. (2006) who found that the branchiospinules (sieving apparatus) inside the menhaden’s gill chamber was small enough in age 0 fish to retain particles the size of most of the phytoplankton occurring in Chesapeake Bay. However, those researchers also found that as the juvenile fish grow, at approximately age 1, their sieving apparatus also grows to the point that most of the small phytoplankton particles are not retained. This finding is also consistent with the Lynch et al (2010) study that found that adult (age 1+) menhaden eat mostly zooplankton. Finally, Lynch and his colleagues found that all menhaden excrete large amounts of ammonia-N, a nitrogenous product that is more bio-available than the nitrogen from runoff. This finding is consistent with previous work by Oviatt et al. (1972). This excretion, around 60% of menhaden’s total food intake, offsets the amount of phytoplankton consumed by age 0 fish and the small amount of phytoplankton consumed by age 1+ fish.

Atlantic menhaden are migratory along the Atlantic coast from Florida to Nova Scotia and constitute a single genetic population. Management of Atlantic menhaden is accomplished through the Atlantic States Marine Fisheries Commission, an interstate fishery management body that recognizes that migratory fish populations cannot be effectively managed by individual state action, but must be managed through coordinated interstate action. No single state could enact any fisheries provisions that would have a measurable impact on the status of the coastwide population that could be attributable to that state's action. The only state that allows a large reduction fishery is Virginia. Other states only allow small amounts of bait fishing for menhaden. It would be impossible for EPA to evaluate programs at the state level and conclude that any state did anything that resulted in increasing the menhaden population, even if they did have a significant impact on reducing nitrogen, which they do not, as evidenced by the research cited above.

It should also be noted that the Lynch et al. (2010) study found that zooplankton is the most significant consumer of phytoplankton in Chesapeake Bay. Recognizing that menhaden are a significant predator of zooplankton, it is likely that a large presence of menhaden in the Chesapeake Bay would negatively impact the ability of zooplankton to remove phytoplankton. This fact, along with menhaden's prodigious excretion rate of ammonia-N, leads to the conclusion that a large presence of menhaden in Chesapeake Bay will have an overall negative impact on nutrient removal.

EPA should review the available studies before agreeing to provide credit for nutrient reductions on the basis of menhaden serving as filter feeds. A listing of recent studies on this topic is provided below:

- Lynch, P.D., M.J. Brush, E.D. Condon, and R.J. Latour. Net removal of nitrogen through ingestion of phytoplankton by Atlantic Menhaden, *Brevoortia tyrannus* in Chesapeake Bay. Mar Ecol Prog Ser, Vol. 401: 195–209, 2010.
- Oviatt, C. A., A. L. Gall, S. W. Nixon. 1972. Environmental Effects of Atlantic Menhaden on Surrounding Waters. Chesapeake Science, Vol. 13, No. 4, (Dec., 1972), pp. 321-323.
- Friedland, K.D., D.W. Ahrenholz, J.W. Smith, M. Manning, and J. Ryan. Sieving Functional Morphology of the Gill Raker Feeding Apparatus of Atlantic Menhaden. Journal of Experimental Zoology: 305A: 974–985 (2006).

2. EPA's Chesapeake Bay Model (Inputs and Outputs) has Serious Deficiencies.

There are serious concerns about the validity of the data generated by EPA's Chesapeake Bay Model, in large part due to errors in the inputs and outputs. EPA's model was intended to be used as a tool to guide state programs. However, under EPA's proposed TMDL, the model has become not a tool but the determining factor in how loads are allocated. Accordingly, there is greater cause for concern about the deficiencies in the inputs and outputs of the model.

EPA itself has acknowledged that additional "refinements" are necessary, and will take place in 2011, with possible further modifications in 2017. *See, e.g.*, Letter from EPA Region III to the watershed states, July 1, 2010. EPA has also stated that any corresponding adjustments to the allocations resulting from the modeling refinements will be addressed in the 2011 round of state WIPs. *Id.*

Following is a summary of the modeling concerns that have been raised by the watershed states and stakeholders:

- EPA models have not been fully validated or peer reviewed, and the records of what validation and peer review have occurred have not been made available to the public;
- EPA's models were calibrated using data from years with widely varying hydrologic conditions that are not representative of the conditions being projected through the TMDL;
- EPA has not explained, justified or documented the actual uncertainty/error/precision of the models;
- Over 130 nonsignificant discharges in Virginia were not included because they were not correctly located;
- The model fails to simulate the performance of nutrient management plans;
- There is uncertainty in how delivery factors were applied;
- Changes in the model have resulted in different outputs for chlorophyll-*a* that call into question both the assumptions in the model and the validity of the chlorophyll-*a* criteria itself;
- CSOs were not modeled as intended;
- The groundwater inputs to the models are not representative of actual conditions;

- The impact of urban stormwater loads is highly sensitive to EPA's assumptions regarding urban land uses, which have not been validated or subjected to public review; and
- The models are so complex and highly parameterized that it is possible to obtain the "right" answer for the "wrong" reason.

EPA appears content to wait to address these concerns during the 2011 modeling refinement process (*i.e.*, after the TMDL has been finalized). This places the regulated community in an untenable position, facing regulatory costs and the threat of fines and penalties for failure to implement when there are serious questions about the integrity of the modeling projections. The final TMDL should specifically list the modeling issues to be addressed in 2011, along with the anticipated impacts on the TMDL itself (*e.g.*, on specific wasteload and load allocations, or EPA's assignment of reductions among different sources/sectors). EPA's failure to address these concerns as part of the TMDL will result in great regulatory uncertainty and conflict, unlike Virginia's WIP, which provided a clear and certain path forward with buy-in from all stakeholders and an implementation framework largely in place.

VIII. EPA's Endorsement of the Use of Offsets to Address New and Expanded Discharges is Sensible and Appropriate to Accommodate Future Growth Within the Watershed.

Virginia's WIP explained that the allocations it contained served as a cap; new or expanded dischargers would be required to obtain offsets for their nitrogen and phosphorus loadings before they could discharge. EPA's proposed TMDL retains that concept. VMA believes this is an effective and sensible means of addressing growth.

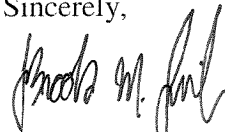
IX. Conclusion

VMA believes that Virginia's September 3, 2010 WIP provides a sensible, well-reasoned and effective strategy for addressing Virginia's contribution to Chesapeake Bay impairment. Although the TSS allocations for industrial point sources will need to be revised to address site-specific conditions, once those corrections are made VMA supports the WIP. EPA's rejection of Virginia's WIP and development of its own proposed allocation scheme in the TMDL is not supported by substantial evidence, exceeds EPA's legal authority, and reflects an approach to sediment that on its face is arbitrary and capricious. It is VMA's hope that EPA will work with the Virginia regulatory agencies and Virginia stakeholders to


develop a final TMDL that is based on sound science, environmental benefit and equitable allocations.

Thank you again for the opportunity to provide these comments.

Sincerely,



Brooks M. Smith
Counsel to VMA



Andrea W. Wortzel
Counsel to VMA

cc: Mr. Anthony Moore
Mr. David Paylor
Mr. David Johnson
Members, Virginia State Water Commission